## Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

## Listing of the Claims:

- 1. (Canceled)
- 2. (Currently Amended) An ink jet ink composition comprising water, a humectant, and a hyperbranched polymeric dye comprising a hyperbranched polymer having a dye chromophore pendant on the polymer chain, The composition of Claim 1 wherein said hyperbranched polymer having a dye chromophore pendant on the polymer chain has the formula:

HB-D<sub>n</sub>

wherein:

HB is a hyperbranched polymer core; D is a dye moiety; and n is an integer of at least 2.

- 3. (Original) The composition of Claim 2 wherein said HB is a polyamide, polyester, polyether, vinylic polymer, polyimine, polysiloxane, polyesteramide or polyurethane.
- 4. (Original) The composition of Claim 2 wherein said HB is prepared by a chain polymerization of a monomer of the formula  $M^1-R^1-M_m^2$  wherein (i)  $R^1$  is a linear or branched alkyl, carbonyl, or aromatic moiety; (ii),  $M^1$  and  $M^2$  are reactive groups that react independently of each other in which  $M^1$  is a polymerization group and  $M^2$  is a precursor of a moiety  $M^2$ \* which initiates the polymerization of  $M^1$  as a result of being activated; and (iii), m is an integer of at least 1.
- 5. (Original) The composition of Claim 2 wherein said HB is prepared by a condensation or addition polymerization of a monomer of the formula M<sup>3</sup>-R<sup>2</sup>-M<sup>4</sup><sub>p</sub> wherein (i) R<sup>2</sup> is a linear or branched alkyl or aromatic

moiety; (ii), M<sup>3</sup> and M<sup>4</sup> are groups that undergo a condensation or addition reaction; and (iii), p is an integer of at least 2.

- 6. (Original) The composition of Claim 2 wherein said HB is prepared by a condensation or addition polymerization of a monomer of the formula R<sup>2</sup>-M<sup>5</sup><sub>q</sub> and R<sup>3</sup>-M<sup>6</sup><sub>t</sub> wherein (i) R<sup>2</sup> is as defined above and R<sup>3</sup> is a linear or branched alkyl or aromatic moiety; (ii), M<sup>5</sup> and M<sup>6</sup> are groups that undergo a condensation or addition reaction; and (iii), q is an integer of at least 2 and t an integer of at least 3.
- 7. (Original) The composition of Claim 4 wherein  $M^1$  is a non-substituted or substituted vinylic group,  $M^2$  is X,  $-CH_2X$  or  $-CH(CH_3)X$  wherein X is Cl, Br, I, S-C(=S),  $YR^4R^5$  or  $-O-NR^4R^5$ , Y=O or N, and  $R^4$  and  $R^5$  are each independently

$$-(CH_2)_r$$
 (r = 1-12),  $-C_6H_5$ ,  $-C(O)O$ , or  $C(O)$ .

- 8. (Original) The composition of Claim 5 wherein  $M^3$  and  $M^4$  are each independently -COOH, -OH, -C(O)Cl, epoxy, anhydride, NH, or NH<sub>2</sub>, and  $R^2$  is
- $-C_6H_3$ -, or  $-(CH_2)_s$ - $C(R^6)$  wherein  $R^6$  is a linear or branched alkyl or aromatic group and s is an integer of 1-14.
- 9. (Original) The composition of Claim 6 wherein  $M^5$  and  $M^6$  are each independently -COOH, -OH, -C(O)Cl, epoxy, anhydride, NH or NH<sub>2</sub>, and  $R^3$  is

 $-C_6H_4-,-C_6H_4-O-C_6H_4-,-C_6H_3,\,N(CH_2)_3-,-C_4H_8-,-C_6H_{10}-,\\$ 

$$-0 \longrightarrow \begin{array}{c} O & CH_2O \\ O & O \\ O & O \end{array}$$

$$\begin{array}{c} O - O \\ O - O \end{array}$$

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10. - 18. (Canceled)